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| 09/749,270 | 12/27/2000 | David S. Dunning | P9456 | 4853 |

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EXAMINER

WILLIAMS, LAWRENCE B

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2634 | 6 |

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/749,270

Applicant(s)

DUNNING ET AL.

Examiner

Lawrence B Williams

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2; 11-23 is/are rejected.
- 7) ☒ Claim(s) 3-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. This application has been filed with informal drawings, which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Specification

2. The disclosure is objected to because of the following informalities:
 - a.) Lines 6-7 of page 4 are unclear. Examiner suggests applicant rewrite for clarity.
 - b.) On page 9, line 13, applicant makes reference to barrel shifter 402. Examiner is unable to find a barrel shifter 402.Appropriate correction is required.
3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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5. Claims 11- 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 11 discloses the limitation, “a tracking clock generator” in line 7 of the claim. No support is supplied for this limitation other than in Fig. 3 of the accompanying drawing set. Applicant does not explain the operation of this “tracking clock generator anywhere in the accompanying specification.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 1, 11 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Myers, Jr. et al. (US Patent 6,584,163 B1).

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(1) With regard to claim 1, Myers, Jr. et al. discloses in Fig. 2, a receiver (130a) for receiving data comprising: an edge processor (205) operative to make decisions using a plurality of edges of a received data stream; a multi-phase clock (200) outputting a plurality of clock phases; and a digital averager (210, 215) coupled to the edge processor and the multi-phase clock and operative to select one of the plurality of clock phases for use by the edge processor (col. 13, line 4- col. 14, line 11).

(2) With regard to claim 11, Myers, Jr. et al. also discloses a device for tracking phase or frequency comprising: a clock generator (200) outputting a plurality of clock phases; a digital averager (210, 215) to receive data corresponding to a plurality of edges of an input data waveform and to generate a control signal (phase detect) in response to said input data waveform; and a tracking clock generator (217) coupled to the digital averager to receive said control signal and correspondingly adjust a phase of the clock generator.

(3) With regard to claim 22, claim 22 inherits all limitations of claim 1, above.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 2, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Myers, Jr. et al. (US Patent 6,584,163 B1) as applied to claims 1 and 11 above in view of Poklemba et al. (US Patent 5,052,027).

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(1) With regard to claim 1, as noted above, Myers, Jr. et al. discloses all limitations of claim 1, above. However, Myers, Jr. et al. does not teach wherein the digital averager includes a barrel shifter.

However, Poklemba et al. teaches in Fig. 5, a digital averager including a barrel shifter (32E) (col. 7, lines 19-46).

One skilled in the art would have clearly recognized that a digital averager including barrel shifter is a well-known technique introduced in many references. Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to apply the method as taught by Poklemba et al. to modify the invention of Myers, Jr. et al. as a known method of manipulating register contents quickly in order to scale data.

(2) With regard to claim 12, claim 12 inherits all limitations of claims 2 and 11 above.

10. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Myers, Jr. et al. (US Patent 6,584,163 B1) as applied to claim 11 above, and further in view of Flake (US Patent 6,665,359 B1).

Claim 21 is simply the method of claim 11 implemented by computer instruction. As noted above, Myers, Jr. et al. discloses all limitations of claim 11, above. Myers, Jr. et al. does not disclose the method implemented by computer instruction. However, Flake discloses a digital data separator implemented by computer instructions (col. 6, lines 22-40).

One skilled in the art would have clearly recognized that the method of claim 1 implemented by computer instruction would not be a novel idea as method implemented by computer instruction are introduced in many references. Therefore it would have been obvious to

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one of ordinary skill in the art at the time of invention to apply the method as taught by Flake to the invention of Myers, Jr. et al. as a method to reduce hardware and increase reliability.

11. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Myers, Jr. et al. (US Patent 6,584,163 B1) as applied to claim 1 above, and further in view of Flake (US Patent 6,665,359 B1).

Claim 23 is simply the method of claim 1 implemented by computer instruction. As noted above, Myers, Jr. et al. discloses all limitations of claim 1, above. Myers, Jr. et al. does not disclose the method implemented by computer instruction. However, Flake discloses a digital data separator implemented by computer instructions (col. 6, lines 22-40).

One skilled in the art would have clearly recognized that the method of claim 1 implemented by computer instruction would not be a novel idea as method implemented by computer instruction are introduced in many references. Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to apply the method as taught by Flake to the invention of Myers, Jr. et al. as a method to reduce hardware and increase reliability.

Allowable Subject Matter

12. Claims 3-10 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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13. Claims 13-20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims and rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence B Williams whose telephone number is 703-305-6969. The examiner can normally be reached on Monday-Friday (8:00-5:00).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence B. Williams

lbw

June 29, 2004


STEPHEN CHIN
SUPERVISORY PATENT EXAMINE
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